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CLAIMS

1. A medical catheter for the transvascular deployment
of a medical device, the catheter comprising an
5 elongate tubular body having a proximal end and a
distal end, a tubular housing being formed at the
distal end of the body for reception of the medical
device, a deployment means for engagement with the
10 medical device, being movable through the housing
to move the medical device between a stored
position within the housing and an in-use position
externally of the housing, characterised in that the
housing comprises a tubular thin-walled medical
15 device embracing pod fixed at the distal end of the
body, the pod extending outwardly from the distal end
of the body and forming an integral extension
thereof.
2. A catheter as claimed in claim 1 wherein the catheter
20 body has an inner tubular core encased within a
concentric thin-walled tubular outer sheath which is
fixed to the core, the sheath being extended
outwardly of a distal end of the core to form the
pod.
- 25 3. A catheter as claimed in claim 2 in which the inner
core is a helically wound metal spring.
- 30 4. A system as claimed in claim 2 in which the inner
core is formed from polymeric tubing.
5. A catheter as claimed in claim 1 wherein the pod is
35 integrally formed with the catheter body, being
formed by a thin-walled distal end portion of the
body of reduced wall thickness relative to a proximal

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portion of the body.

- 5 6. A catheter as claimed in any preceding claim wherein the pod has sufficient axial rigidity to allow retraction of the medical device directly into the pod.
- 10 7. A catheter as claimed in any preceding claim wherein the wall thickness of the thin-walled tube is less than or equal to 0.004 inches (0.1 mm).
- 15 8. A catheter as claimed in claim 2 in which the thin-walled tubular outer sheath is manufactured from a low friction material.
- 20 9. A catheter as claimed in claim 2 wherein the thin-walled tubular outer sheath incorporates a friction reducing agent.
- 25 10. A catheter as claimed in claim 2 wherein the thin-walled tubular sheath has a composite friction-reducing structure.
- 30 11. A catheter as claimed in any of claims 2 to 9 in which the thin-walled outer tubular sheath is manufactured from a polytetrafluoroethylene material.
- 35 12. A delivery system for transvascular deployment of a medical device, the system comprising a catheter as claimed in any preceding claim in combination with an associated separate loading device which is operable to collapse the medical device from an expanded in-use position to a collapsed position for reception within the pod.
13. A system as claimed in claim 12 wherein the loading

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device comprises means for radially compressing the medical device.

- 5 14. A system as claimed in claim 12 or 13 wherein the loading device comprises a funnel having an enlarged inlet end and a narrowed outlet end, the outlet end being engageable within the pod.
- 10 15. A system as claimed in claim 14 wherein the loading device comprises a main support having a funnel-shaped bore formed from a frusto-conical medical device receiving portion terminating in a cylindrical portion formed by a thin-walled loading tube projecting from the main support.
- 15 16. A system as claimed in claim 15 in which the cone angle of the bore is between 15° and 65°.
- 20 17. A system as claimed in claim 16 in which the cone angle is between 35° and 45°.
- 25 18. A system as claimed in any of claims 15 to 17 in which the main support is formed from perspex and the thin-walled loading tube from PTFE.
- 30 19. A system as claimed in any of claims 15 to 18 in which the loading tube is mounted on the main support on a metal spigot at an outer end of the funnel.
- 35 20. A medical catheter pack for an elongate intravascular catheter of the type claimed in any preceding claim comprising a tubular body with a proximal end and a distal end, the distal end adapted for reception of a medical device, the pack comprising a tray having means for releasably holding the distal end of the catheter relative to an associated catheter loading

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device in a cooperative juxtaposition on the tray, the loading device being operable to collapse the medical device from an expanded in-use position to a collapsed position for reception within [the] ⁹pod.

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21. A pack as claimed in claim 20 wherein the tray has a liquid retaining bath formed by recess in the tray, the bath having a depth sufficient to accommodate in a totally submerged state the distal end of the catheter and a medical device for submerged loading of the medical device into the catheter.

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22. A pack as claimed in claim 20 or 21 wherein the tray has a catheter holding channel communicating with the bath, the channel defining a pathway around the tray which supports the catheter in a loading position on the tray.

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23. A pack as claimed in claim 22 wherein means for securing the catheter within the channel comprises a number of retainers spaced-apart along the channel, each retainer comprising two or more associated projections which project inwardly from opposite side walls of the channel adjacent a mouth of the channel, the projections being resiliently deformable for snap engagement of the catheter within the channel behind the projections.

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24. A pack as claimed in claim 22 wherein a ramp is provided at an end of the channel communicating with the bath to direct a distal end of the catheter towards a bottom of the bath.

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25. A pack as claimed in claim 21 wherein means is provided within the bath for supporting the distal end of the catheter above the bottom of the bath.

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26. A pack as claimed in claim 25 wherein said supporting means is a step adjacent the channel.
- 5 27. A pack as claimed in claim 22 wherein means is provided within the bath for supporting a catheter loading device for engagement with the distal end of the catheter to guide a medical device into the distal end of the catheter.
- 10 28. A pack as claimed in claim 27 wherein said means comprises a recess in a side wall of the bath for reception of a funnel with an outlet pipe of the funnel directed towards the channel for engagement
- 15 within the distal end of the catheter.

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